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A Decade of Resolutions by the Association, 1932–1941

At annual meetings of the Association the Council usually passes a number of resolutions, nearly all of which may be included in two general categories. The first are resolutions of courtesy, to use a general term for such resolutions as those of thanks to host institutions and of approval of actions by other organizations. The second are resolutions in support of, or advocacy of, particular policies or actions by other agencies or organizations, and occasionally by the Association itself. Only the resolutions of the second category are of interest here.

In 1932 the Association held a large meeting in Atlantic City and adjourned without passing a resolution of any kind. At the Boston meeting in 1933–4 the Council passed a resolution urging governmental agencies in charge of funds for recovery and reconstruction to employ scientists and engineers more widely because large numbers of them were unemployed. At the same meeting the Council passed the following "Declaration of Intellectual Freedom":

The American Association for the Advancement of Science feels grave concern over persistent and threatening inroads upon intellectual freedom which have been made in recent times in many parts of the world.

Our existing liberties have been won through ages of struggle and at enormous cost. If these are lost or seriously impaired there can be no hope of continued progress in science, or justice in government, of international or domestic peace or even of lasting material well-being.

We regard the suppression of independent thought and of its free expression as a major crime against civilization itself. Yet oppression of this sort has been inflicted upon investigators, scholars, teachers and professional men in many ways, whether by governmental action, administrative coercion, or extra-legal violence. We feel it our duty to denounce all such actions as intolerable forms of tyranny.

There can be no compromise on this issue, for even the commonwealth of learning cannot endure "half slave and half free."

By our life and training as scientists and by our heritage as Americans we must stand for freedom.

At the Pittsburgh meeting in December, 1934, the Council passed several resolutions, one for "aggressive governmental support of scientific work," copies of which were sent to President Roosevelt and members of his Cabinet; one in support of establishing at Washington an adequate U. S. Botanical Garden; one urgently recommending legislation to control pollution of public waters; one in protest against the passage of anti-vivisection legislation; and one advising the retention of certain functions under the control of the U. S. Department of Agriculture. Somewhat similar resolutions supporting or recommending policies or actions were passed at the St. Louis meeting in December, 1935.

It will be observed that the general resolutions passed by the Council during the first half of the decade under consideration were in the nature of approvals, recommendations and urgings of actions by some organization or agency other than itself. The Association expressed concern about the responsibilities and duties of others, but was complacent, at least silent, respecting its own.

In the succeeding five years resolutions began to appear that reflected an increasing realization by scientists that they have responsibilities in their own fields and for the relationships of science to other human interests. This changing attitude, perhaps stimulated by reflections due to long years of depression, found its first clear expression in a resolution passed at the Indianapolis meeting on December 30, 1937.

Whereas, science and its applications are not only transforming the physical and mental environment of men but are adding greatly to the complexities of their social, economic and political relations; and

Whereas, science is wholly independent of national boundaries and races and creeds and can flourish permanently only where there is peace and intellectual freedom; now

Therefore, be it resolved by the Council on this 30th day of December, 1937, that the American Association for the Advancement of Science makes as one of its objectives an examination of the profound effects of science upon society; and that the Association extends to its prototype, the British Association for the Advancement of Science, and to all other scientific organizations with similar aims throughout the world, an invitation to cooperate not only in advancing the interests of science but also in promoting peace among nations and intellectual freedom in order that science may continue to advance and to spread more abundantly its benefits to all mankind.

In 1938, the Council established honorary junior memberships, and also passed a resolution approving international congresses of scientists.

In 1939, at the Columbus meeting, the Council recognized in a unique way the importance of widely disseminating information about science among the general public.

The Council of the American Association for the Advancement of Science expresses its obligation and appreciation to The National Association of Science Writers. By the efforts of its members to disseminate through the newspapers accurate news of progress in all fields of science this organization has become a most important agency in changing the picture of science in the public mind, and is performing a distinctive service to science and the public.

The services of this specially trained group of men and women are unique in the history of journalism and of popular education. Their efforts in bringing before the attention of the world the proceedings of the annual meetings of the American Association for the Advancement of Science, as well as of the other scientific bodies, have proved not only of great value to the public but also to the scientists themselves individually and collectively.

The National Association of Science Writers is keenly aware of the importance of Science as the greatest potential force for the betterment of man, and has worked untiringly to make the scientists themselves aware of their social responsibility as the builders of man's future. . . .

At the Philadelphia meeting in December, 1940, the Council elected a Committee on Science and Society to organize programs and symposia "to make both scientists and the lay citizens of the country increasingly aware not only of the benefits conferred by science but of the many large and baffling new problems which the advance of science is creating, for the progressive solution of which the scientists themselves must assume an increasing responsibility."

The "large and baffling new problems" are now acutely before the world. In facing them, scientists might follow earlier custom by condemning various peoples, policies or actions. Or they might pass ringing resolutions urging some other group or organization to take vigorous steps to ameliorate the world's ills. But their current attitude does not find expression in such resolutions. Instead of attempting to reform the remainder of the world, they are now becoming disposed to examine and correct their own intellectual and social myopias. In doing this they are setting a new pattern, for although "charity begins at home" (an excuse for selfishness), reform has not done so (a commentary on human nature). Reform has relied in vain on commandments, not only the Ten but hundreds of others, and they have echoed back commandments.

Reduced to an aphorism, the wisdom-laden discovery scientists are making may be expressed in a few simple words: *Let us be critical of ourselves and generous in our judgments of others.* As the far-reaching implications of this sentence are explored it becomes remindful of the deep wisdom of Benjamin Franklin and of some of the moral grandeur of the Golden Rule.

State Academies and District Meetings

The A.A.A.S. nation-wide meeting was canceled for the dates (1942) that had been announced. It is not yet clear when the next nation-wide meeting can be held. It would seem that the reasons for the recent postponement or cancellation would hold regarding any plan for a general meeting at any early date. The suggestion which follows is based partly on the assumption that no nation-wide meeting is likely until the war situation has cleared.

The state academies, with a few exceptions, restrict their functions to their respective state boundaries. A few academies by their constitutions include more or less than the area of an entire state. In most of the academies visitors at the annual meetings are always welcomed from adjacent territory, but there is no planned coverage of adjacent territory. The boundaries of some states bear little or no relation to topographic, geographic, social, educational, industrial, or transportational features of the area included. A scientist who lives in Northwestern Illinois is much closer, functionally, to the state academy centers of Wisconsin, possibly those of Iowa or even Minnesota, than to those of his own state. This man's transportational problems sometimes favor attendance upon the meetings of an adjacent state, even though he continues to attend his own academy's meetings, as of course is desired. In some such locations, a scientist might have his scientific work and his personal relations more closely allied to his own geographic and industrial area than to those of the place where his state's annual meeting is held.

Then, during war when long-distance travel must be restricted, could there not be somewhat

larger academy meetings, deliberately including scientists from related territory of adjacent states? That is, could there not be district or regional meetings organized about the academy? Such a plan might prove stimulating without loss of any of the valuable services already developed by the state academy. Possibly those who make the programs could enlist cooperation from outstanding scientists from related regions. No one state contains all the good scientists. It might be possible to enlist the cooperation of officers of the Association, including vice presidents and section secretaries, and some of the nation's most renowned scientists, though they are mostly now occupied by their war services.

This year's annual meeting of some academies has already been held. Others are already fully programmed. The suggestion, if used, might be tried by academies whose meetings will come in the spring and early summer.

This statement does not of course cover all the considerations that are pertinent to the discussion of holding regional meetings during these critical times. It is intended only to point out clearly the desirability of conducting experiments in holding regional meetings of scientists during the war period. Possibly such meetings might develop important permanent benefits in the services to and from science. If such meetings prove useful they will help toward the purposes of the American Association for the Advancement of Science.—OTIS W. CALDWELL, General Secretary, A.A.A.S.

The Southern Association of Science and Industry

It was agreed at the meeting of the Alabama Academy of Science, March 29–30, 1940, that the Academy sponsor a meeting of southern scientists, and others interested in science, at its next annual meeting for the purpose of organizing a "Southern Scientific Society."

Over 3000 invitations to this "Southern Scientists" meeting were sent to scientists and industrialists over the South. Delegates from practically all the scientific organizations of the South and representatives in scientific and industrial fields of ten Southern states met with the "Alabama Academy of Science" at the Admiral Semmes Hotel and Spring Hill College in Mobile.

At this organization meeting of the "Southern Association for the Advancement of Science." March 20–21, 1941, a Symposium on Scientific Work was conducted by leaders from over the South.

The Georgia Academy of Science served as host in Atlanta for the second annual meeting at the Biltmore Hotel and Emory University, April 2–3, 1942. At this time the name of the organization was changed to "The Southern Association of Science and Industry" to indicate more clearly the participation of industrialists and business men in the organization.

As stated by Dr. L. B. Roberts, Arkansas A. and M. College, Treasurer and Chairman of the Membership committee:

The primary reason for the effort to set up such an organization was the recognition of two facts: the existence of certain problems peculiar to the South and common to all or most of the Southern States, and the lack of an adequate program of research in the South. Because of their relative isolation the State Academies are unable to do justice to the task, and national organizations are not vitally interested in the discovery and solution of sectional problems. It is the purpose of the S.A.S.I. to work for the detection and solution of southern problems and the overcoming of southern handicaps in research and in industry by fostering full cooperation and coordination of all research agencies in the South and the full utilization of all their facilities. In furtherance of this purpose State Academies and other scientific organizations in the South are invited to affiliate, and their members and others interested in the progress of scientific research are invited to join.

According to the constitution, membership in the Association shall be: (a) Individual, (b) Institutional, and (c) Affiliate.

Election to membership shall be by vote of the Executive Committee upon recommendation of the Membership Committee.

Individual membership shall be open to all persons in the territory who are interested in the progress of scientific research. Persons outside of the territory who have shown great interest in the scientific or industrial development of the South may be invited by the president, after regular election, to become members. The individual membership dues shall be two dollars per year.

Institutional membership shall be open to industrial, educational, and research organizations in the territory which are interested in supporting scientific research. The institutional membership dues shall be ten dollars per year.

Affiliate membership shall be open to organized scientific groups (State Academies, etc.) in the territory.

The territory covered by the Association shall be the District of Columbia and the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Maryland and Virginia. Additional Territory may be added by vote of the Executive Committee.

It was agreed at the Atlanta Meeting last year that charter members "are those elected through the next meeting." If a meeting is held in 1943, it will probably be in April.

Believing that the S.A.S.I. may aid other southern scientific organizations in many ways, we wish to extend invitations to these organiza-

tions to affiliate with the S.A.S.I. A number of State Academies of Science, including those of Alabama, Arkansas, Georgia and Mississippi have already affiliated, and certain other science organizations, although they had no instructed delegates at the Atlanta meeting, are officially on record as affiliating with the S.A.S.I. Affiliate membership, entailing no responsibility and requiring no dues, helps the S.A.S.I. in the sense that it is backed by a number of organizations, representing scientists, industrialists, economists, etc.

Application blanks for individual, institutional, and industrial membership, as well as copies of the constitution, various reports of proceedings, and articles may be obtained from the secretary.

The officers and many other members of the American Association for the Advancement of Science have helped us very much and we hope that we may all work together in presenting a united front of scientists—both basic and applied —and industrialists in the advancement of the South as this will in turn contribute to the advancement of our nation.—George D. Palmer, Secretary, S.A.S.I., University, Ala.

A County Community Helps Itself

The Lebanon County Mental Health Clinic, since its inception in 1936, has developed a broad community program which has been of great service in its locality. Lebanon county, in eastern Pennsylvania, with a population of about 72,000, has rapidly urbanized during the past twenty years, largely on account of the introduction of new industries. While the county is apparently well favored by Nature, its death rate is higher than that of the surrounding larger counties. State statistics also demonstrate that it has, or has had, a higher rate for mental illness and mental deficiency than other sixth class counties in the State.

The program of the Lebanon County Mental Health Clinic represents a local response to local conditions. Control is vested in an Advisory Board composed of representatives of all educational, business, industrial, civic, charitable, professional, and most religious interests from various parts of the county. Service on the Board is purely voluntary. The State, through the Wernersville State Hospital, cooperates by furnishing the Clinic with psychiatric service. Local physicians serve on the Staff as pediatricians or in other ways.

In 1936 the Clinic inaugurated, as its first step, a program of psychometric examinations in the county schools through the visits of a traveling psychologist certified by the State Department of Public Instruction. An appreciable amount of educational work had to be carried on before and after these visits, through publications and personal contacts. Teachers, many of them of limited preparation, were furnished with "sieving" tests and instructed how to use them. While the primary purpose of these visits was the approved identification of feeble-minded pupils, with the objective of establishing special schools for them, attention was also given many cases of maladjusted but otherwise normal children. There was also the additional objective of anticipating future juvenile delinquency. Inasmuch as a state-wide program of this kind had been projected by the State Department of Public Instruction, this phase of the Clinic's work was under its guidance.

Psychiatric aid was also extended as required, and the Committee on Women's Activities sponsored classes in remedial reading and speech correction, at the county seat, for children from both city and county schools. The results in classrooms and homes were encouraging. By the time the State appointed a school psychologist for the county, in 1942, the Clinic had aided several hundred pupils towards better adjustments to their environments. In 1939 the same program was extended to the Parochial Schools, with the approval of the Bishop of the Diocese.

Psychiatric and psychological guidance were, of course, available for adults and post-school youth from the beginning. The former involved the more familiar neuroses and psychoses and personality problems. Over 400 individuals have benefited thus far through the efforts of the psychiatrists. Post-school youth sought advice on whether or not to go to college, vocational guidance, and aid in personality problems. However, the most significant contribution of the Clinic to this group was the establishment, in 1937, of evening classes in Lebanon with the cooperation of the Pennsylvania State College. These classes were taken over by the Lebanon City Schools later on and grew to an enrollment of as many as 500 men and women.

The services of the Clinic are not exclusively charitable. Exceptions were made to the general rule that those who can pay should pay when it was evident that exceptions were in the public interest. At other times, the Clinic regarded such cases as educational demonstrations for the community, believing that the public should think of testing and guidance procedures

as normal activities. Finally, since modern psychiatry teaches that the first six or seven years of a child's life are most important, the Clinic is especially alert for cases suggesting potential schizophrenia, the insanity of youth, which is responsible for one-fourth of the cases admitted to the State hospitals. To date over 1,400 children, women and men of Lebanon County have benefited directly by the service of psychiatrists and psychologists of the Clinic.

Like any young and healthy organization, the Clinic has been parent to other groups arising from its activities from time to time. Of these, the evening classes are an outgrowth of the work of the Committee on Business and Industry. The Committee for the Clergy and Family Adjustment Center gave rise to the Family Welfare Association, which assumed responsibility for the extra-clinic activities on behalf of juvenile delinquency, pre-marital education, marriage counselling. Its successor, the Committee on Religious Activities, conducted in November a Conference on Religion and Health which was attended from a radius of over 50 miles by clergymen, educators, physicians, religious workers and laity. Religious men and psychologists from nearby colleges; psychiatrists from public institutions and outstanding clergymen of the vicinity furnished the program. About a year ago, the Clinic was instrumental in organizing the Lebanon County League for Better Hearing, which immediately established lip reading classes as a contribution toward the mental hygiene of a large group of afflicted people in the county. Companionate as this is to the work carried on for the blind by the local Lion's Club, they are insisting upon an adequate inspection of the hearing of public school children and now plan to establish lip reading classes for them.

Evidently, such a program as that outlined had to be reenforced by educational measures. Accordingly, a voluntary Speakers Bureau has been maintained. Four or five educational bulletins of the Clinic, of authoritative authorship on some phase of mental health, are published each year and given a wide distribution with the sponsorship of some supporting organization, such as a Civic Club, bank, etc. Characteristic titles are "Twenty Aids to Mental Health for Adults," "Mental Health and Religion," "Guide to Hobbies," "The Challenge of Marriage Instruction," "The Problem of Drug Addiction," "Is Your Child Lefthanded," "Children in Foster Homes," "The Mental Health of the Crippled Child," "Training for Desirable Habits in Young Children," and "Mental Aspects of Traffic Accidents." The U. S. Public Health Service and various State Mental Hygiene Societies have been generous in permitting the Clinic to reprint some of their publications. Its Staff and Board write others.

In its administrative policies the Clinic looks for expert advice from authorities in various fields, pre-eminently, of course, but not alone, from the National Committee for Mental Hygiene. It has found a fine cooperative spirit in all such groups. It in turn endeavors to reflect their spirit in its own work.—N. M. GRIER, Ph.D., Lebanon, Pa.

Affiliated Academy Research Grants

Annually the Association appropriates from endowment income a grant for research to each affiliated academy. This grant is awarded by the academy to one or more of its members. Membership in the Association is not required in order that an applicant may be considered for the grant.

The project to be undertaken is first approved by the academy officers and then reported to the Office of the Permanent Secretary, together with the name and address of the grantee. Immediately upon receipt of this information, a check for the amount of the grant is forwarded to the academy secretary who in turn sends an academy check to the grantee. This procedure assures proper recording of the grant in the financial records of both the Association and the academy. The grantee is required to supply either progress reports or a final report on the work accomplished, for which blank forms are provided. That is the only requirement as far as the Association is concerned.

The amount of the grant from the Association to an academy depends upon the number of members of the academy who are also in good standing in the Association. For each member in good standing the Association allows 50 cents, but in no case is the grant less than $25 for the year. Up-to-date membership lists are requested of the academies each year. These lists are checked against the membership records of the Association in the late summer when the paid-up membership is at its peak for the year, thus giving the academies full benefit of late payments of dues.

After checking for the fiscal year ended September 30, 1942, it was found that the total number of members in the affiliated academies was 14,445. Of this number 4,647 were members of the Association in good standing and 9,798 were

not members of the Association. In addition there were 193 academy members who were in arrears for dues in the Association.

The academies obviously may increase the grants they receive by encouraging their members to become members of the Association. The Association cooperates by extending the privilege of membership to all members of the affiliated academies. For example, in 1941 the Office of the Permanent Secretary sent out 8,467 personal letters to academy members inviting them to become members of the Association. In response to these invitations 204 academy members, or 2.41 per cent of those invited, became members of the Association. Returns in response to invitations to members of other societies indicate that the percentage of acceptances by academy members may be considerably increased with resulting corresponding increases in grants for research from the Association.

Since the Association, in 1935, inaugurated the policy of making grants to the affiliated academies it has appropriated for this purpose from income received from endowment funds a total of nearly $18,000. The grants for 1943, which will be made as usual in spite of the postponement of the New York meeting, will amount to approximately $2,400.

A Who's Who of American Scientists

Such a large percentage of Americans who have made distinguished contributions to science and its applications are members of the Association that its membership roll is almost a who's who of American scientists. For example, all American Nobel laureates in science since the Nobel prizes were established in 1900, except one in the field of medicine, are, or were before their deaths, members of the Association.

The distinguished list of Nobel prize winners includes A. A. Michelson (president of the Association, 1910), T. W. Richards (president, 1917), R. A. Millikan (president, 1929), Irving Langmuir (president, 1941), T. H. Morgan (president, 1930), H. C. Urey (vice president, 1928), E. O. Laurence (vice president, 1939), A. H. Compton (president, 1942), G. R. Minot, G. H. Whipple, and C. D. Anderson.

Of the seventeen presidents of the National Academy of Sciences since its establishment under a Federal charter in 1863, ten have been presidents of the Association. They include Joseph Henry (1849), A. D. Bache (1850), W. B. Rogers (1876), O. C. Marsh (1878), Wolcott Gibbs (1897), Ira Remsen (1902), W. H. Welch (1906), A. A. Michelson (1910), C. D. Walcott (1923) and T. H. Morgan (1930). Six of the remaining seven former presidents of the National Academy of Sciences were members of the Association, and the names of nearly all its present members are found on the Association's membership roll. All the deceased secretaries of the Smithsonian Institution served as presidents of the Association, and the present secretary, C. G. Abbot, has been a member of the Association since 1900. All the directors of the National Bureau of Standards have been members of the Association.

Among the presidents of leading educational institutions who are now members of the Association are Isaiah Bowman (Johns Hopkins), K. T. Compton (Mass. Inst. of Technology), J. B. Conant (Harvard), E. E. Day (Cornell), E. C. Elliott (Purdue), A. G. Ruthven (Michigan), W. C. Wickenden (Case School of Applied Science), R. B. von KleinSmid (Univ. Southern Calif.) and Ray Lyman Wilbur (Stanford). Literature is represented by Rupert Hughes and William Lyon Phelps (Yale).

Of the distinguished medical men who have been members of the Association are Charles H. and William J. Mayo, William H. Welch (president, 1906), Simon Flexner (president, 1919), J. J. Abel (president, 1932), and Walter B. Cannon (president, 1939). Members of the Association who are distinguished for their researches in a far different field, that of engineering, include Michael I. Pupin (president, 1925), W. F. Durand (president of Pacific Division, 1933), S. P. Langley (president, 1887), Orville Wright, Charles F. Kettering (vice president, 1933; General Motors), Gano Dunn (J. G. White Engineering Corp.), and F. B. Jewett (vice president, 1930; president of the National Academy of Sciences).

Administrative officers of great industries depending on and conducting scientific research who are now members of the Association include Irenee du Pont and Pierre S. du Pont (E. I. du Pont Company), Edward Bausch, Carl L. Bausch and Herbert Eisenhart (Bausch and Lomb Optical Co.), W. D. Coolidge (General Electric), Paul E. Klopsteg (Central Scientific Company), C. O. Curme (Carbide and Carbon Chemicals Corp.), Norman B. Pilling (International Nickel Company), C. E. K. Mees (Eastman Kodak Co.), R. T. Major (Merck and Co.), H. N. Ott (Spencer Lens Co.), G. A. Harrop Squibb and Sons), Charles N. Frey (Standard Brands), R. A. Halloran (Standard Oil of Calif.), Robert E. Burk (Standard Oil of Ohio),

R. C. Newton (Swift & Co.) and L. W. Chubb (Westinghouse Electric and Manufacturing Company).

Members of the Association whose names have become household words because of their public service include Herbert Hoover (former President of the United States), Felix Frankfurter (justice of the Supreme Court), Elihu Root (member of cabinets and diplomat) and Donald M. Nelson (chairman, War Production Board).

Financial Reports for the Fiscal Year 1941–42

Financial reports of the Association for the fiscal year ended September 30, 1942, have been approved recently by certified public accountants. The finances of the Association are in two parts, the permanent funds for which the Treasurer is responsible and the current funds, consisting mainly of dues, which are in charge of the Permanent Secretary.

The permanent funds, or endowment funds, are classified according to the wishes of the donors or according to provisions of the Constitution, such as fees of living and deceased life members. These funds on September 30 were: for research, $118,811.45; for general purposes, $92,097.88; for dues of emeritus life members, $5,000, and for dues for emeritus annual members, $500. Included in the permanent funds is a reserve fund amounting to $41,854.80, made up mainly from accumulations of profits from the sales of securities. On September 30, 1942, the total amount of permanent funds was $258,264.13, of which $193,371.67 was in securities and $64,892.46 was in cash awaiting investment.

At the beginning of the year, there was cash on hand amounting to $136,019.22, of which $120,149.91 was awaiting investment. Receipts of $53,307.73 include sales of securities, $45,488.46; interest and dividends, $4,984.27; contribution to the prize fund, $1,000; fees of new life members, $1,700, and miscellaneous receipts, $135. The total available for disbursement during the year was $189,326.95.

Disbursements for the year consisted of securities purchased, $89,023.25; grants to individuals for research, $1,791.89; research grants to affiliated academies, $1,858.50; for fees of emeritus life and emeritus annual members, $600 and $24, respectively; journal subscriptions for life members and fifty-year members, $1,617 and $75, respectively; for the Thousand Dollar Prize, $1,000; miscellaneous expenses, $90.38. In addition to these disbursements, $13,585.23, transferred by the Office of the Permanent Secretary to the Treasurer for investment, was returned. The total of these disbusrements was $109,665.23, leaving a cash balance at the end of the year of $79,661.70, of which amount $64,892.46 represented cash awaiting investment and $14,769.24 was available for current purposes.

During the year the dues and entrance fees collected by the Office of the Permanent Secretary amounted to $108,442.75; registration fees and receipts from the exhibition at the Dallas meeting were $1,849 and $3,287, respectively, and miscellaneous receipts amounted to $2,162.11. Total income for the year was $115,740.86.

Expenses amounting to $113,347.85 included $66,709.36 for journal subscriptions, $2,140.09 for seven issues of the A.A.A.S. BULLETIN, $24,723.50 for expenses of the Washington office, $2,840 for allowances to the Pacific and Southwestern Divisions, $7,550.54 for circularizing for new members, $7,670.68 for general and exhibition expenses, $391.45 for expenses of the General Secretary, and miscellaneous expenses of $1,322.23. The excess of receipts over expenditures was $2,393.01. Cash reserves at the close of the year were $37,711.29.

In addition to its regular activities, the Office of the Permanent Secretary is responsible for the publication of such symposia as may be authorized by the Executive Committee. The selling prices of the volumes are expected to cover only the printing, advertising, and mailing costs. Since the series was started in 1938, 15 volumes have been published. Up to September 30, 1942, 14,915 copies had been sold, the receipts from which totaled $38,050.34. The total of the costs to manufacture, advertise, and mail these symposia was $38,444.85, leaving an excess of costs over receipts amounting to $394.51. Advance sales of one publication which is now in the process of production was $73.92.

Dutch Scientists in Japan

A propos of the note in the A.A.A.S. BULLETIN of November, 1942, page 71, regarding early Japanese investigations on nutrition, it may not be amiss to mention the role of Dutch scientists in the organization of the hygienic and pharmaceutical service in Japan. Among these were the Dutch pharmacists Geerts, Dwars, Plugge and J. F. Eÿkman, a brother of the noted Nobel laureate Christiaan Eÿkman. Of these four men Eÿkman, the most prominent, stayed over eight years (from February 1877 to October 1885) in Japan. At the recommendation of Professor

Gunning, Eÿkman, at the age of 25, was appointed director of the State pharmaceutical and hygienic laboratory at Nagasaki. The following year (1878) he took charge of a similar laboratory at Tokyo. In this capacity Eÿkman took an active part in the publication (in German) of the first Japanese Pharmacopoeia.

In 1881 he became the first European occupant of the chair of chemistry and pharmacology in the medical faculty of the Tokyo University (Tokiodaigaku) where he taught, first in English, with a Japanese interpreter, and later on, in German. The heavy teaching load (there were 5,000 students, in charge of 200 instructors), in addition to his other duties, undermined his health and forced him to resign in 1885. After his return to Amsterdam Eÿkman completed his commentary on the pharmacopoeia, undertaken at the request of the Japanese government. For his eminent services Eÿkman received the insignia of an officer, fourth class, of the order of the Rising Sun.—H. S. VAN KLOOSTER.

Aerobiology

Extramural aerobiology is concerned with the distribution of living organisms by the exterior air and with some of the consequences of their distribution. It includes within the field of its interests insect populations, plant pathogens, fungus spores and pollens—in fact, all forms of life, both plant and animal, that are borne aloft by the air and either deposited locally or transported over distances ranging up to hundreds and even thousands of miles. It discusses methods of determining the kinds and numbers of organisms being carried by the air, whether they are injurious insects, allergens or pathogens. It raises questions about the dispersion of species and races. It contains material of interest to botanists, zoologists, geneticists, agriculturists, allergists, and the general public.

Intramural aerobiology is equally diverse and important. It begins with the problem of contagion by airborne infectious materials. It investigates the expulsion of secretions from the mouth and nose in the acts of sneezing, coughing, and talking, and the behavior in the air of organisms of whatever origin. It follows the infections from the dissemination of pathogenic organisms into the operating room, the hospital ward, the cubicle for infants, the school and the home. It examines the method of the spread of epidemics of children's diseases. It investigates methods of producing ultraviolet radiation and its bactericidal, clinical and physiological effects and other means of providing barriers to the spread of infection.

. . . Aerobiology has greatly extended the horizons of several fields of science. It has demonstrated the ease with which the ocean of air that envelops us carries and mingles the myriads of forms of small organisms that inhabit the earth. . . . It makes clear the invisible routes by which pathogenic bacteria and viruses may pass from the ill to the well and prepares the way for blocking them. —From the Foreword of the Association's symposium on Aerobiology. x + 289 pages, quarto, illustrated, 37 contributors, cloth bound. To members, $3.50.

Officers of the Association

President, Arthur H. Compton; *Permanent Secretary,* Forest R. Moulton; *General Secretary,* Otis W. Caldwell; *Treasurer,* C. Carroll Morgan; *Assistant Secretary,* Sam Woodley.

Executive Committee: Burton E. Livingston, *Chairman;* Roger Adams, Joseph W. Barker, Otis W. Caldwell, Walter B. Cannon, J. McKeen Cattell, Roy E. Clausen, Arthur H. Compton, F. R. Moulton, and W. E. Wrather.

Membership in the Association

According to the Constitution, the objects of the Association are to promote intercourse among those who are cultivating science in different parts of America, to cooperate with other scientific societies and institutions, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for the labors of scientific men increased facilities and a wider usefulness. Members may reside in any country. A person desiring to become a member of the Association should fill in a membership application card that may be obtained from the Office of the Permanent Secretary and return it with his payment of $5.00 for one year's dues. Every member in good standing receives with his membership a subscription for either *Science* or *The Scientific Monthly.* Dues are for the fiscal year that begins October 1; the subscription begins the following calendar year. A member desiring to receive both journals concurrently may do so by paying $3.00 in addition to the regular dues. Members in good standing receive also, without extra charge, subscriptions for the A.A.A.S. BULLETIN, and they may purchase symposia publications at prepublication prices, and after publication at special prices to members.

A person who pays $100 during one fiscal year may be elected a life member; sustaining members pay $1,000. Both classes are exempt from the payment of further dues but are entitled to all the privileges of membership.

An incorporated scientific society or institution or a public or incorporated library may become a member by paying the entrance fee of $5.00 in addition to the dues. Such institution members are entitled to the same privileges as individual members.

Members are encouraged to nominate for membership persons who desire to cooperate in carrying out the objects of the Association. Names may be sent to the Office of the Permanent Secretary at any time. In the letter of invitation to become a member of the Association the name of the person making the nomination is ordinarily mentioned.

Journal Subscriptions

January issues of *Science, The Scientific Monthly,* and the A.A.A.S. BULLETIN will be the last copies sent to members in arrears for 1943. It is urged that members in arrears send their dues promptly to assure copies for the remainder of the year. Back numbers may be difficult to supply.